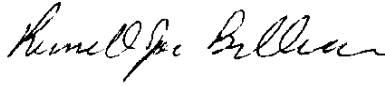


APPENDIX C
ESA/EFH CONSULTATION LETTERS

MEMORANDUM FOR: Craig Johnson

JAN 10 2000

FROM: Russell Bellmer



SUBJECT: Informal ESA Section 7 consultation and Concurrence with a Determination of Not Likely to Adversely Affect Listed Species for the Proposed Wasser/Winter and Nursery Site Restoration Projects.

Wasser/Winter Proposed Project Site. The Wasser/Winter site is located in the City of Tacoma between Marine View Drive and the upper turning basin of the Hylebos Waterway, on land owned by the Port of Tacoma. The site is adjacent to the tidally influenced, channelized, lower reach of Hylebos Creek where the creek drains into the Hylebos Waterway. Upland areas of the project site encompass a flat area vegetated with grasses and shrubs. The site itself extends northeast from the centerline of the creek to a fence that borders an asphalt cap/parking area, and seaward to the pierhead line in the turning basin. A log storage yard borders the site to the southwest across Hylebos Creek, and State Route (SR) 509 crosses Hylebos Creek immediately southeast of the site. The site dimensions are approximately 1,000 by 100 feet, totaling about 2.3 acres. Soils are characterized as sandy/silt dredge fill overlying pre-development tideflats.

Upstream of the SR-509 bridge is a two-acre Washington State Department of Transportation (WSDOT) compensatory mitigation site comprised of constructed intertidal marsh surrounded by riparian vegetation (WSDOT, 1994). Further upstream of the WSDOT site, Hylebos Creek contains riparian and riverine habitat for a variety of migratory and resident fish, birds, and small mammals.

Historically, Hylebos Creek has been a prolific salmon-spawning stream (King County and Federal Way, 1990). Salmon runs have declined in part due to urbanization of spawning areas. As of 1990, the watershed was approximately 50 percent developed, which has increased peak flows, degraded the riparian zone, and adversely affected water quality (King County and Federal Way, 1990). Localized areas of suitable spawning habitat exist, however, particularly on the West Branch of Hylebos Creek. In the 1970's and 1980's the Puyallup Tribe stocked Hylebos Creek with chinook, chum and coho (Ladley, personal communication, 1999). Although these

programs have been discontinued, vestigial populations enter the creek annually to spawn. The near-shore area and Hylebos Waterway are used extensively as rearing and feeding habitat by numerous marine species, and as a migratory pathway for salmonids.

Proposed Project Site. At the project site, Hylebos Creek is a straight channel with steep banks, and is tidally influenced. At low tide [below +1 feet above mean lower low water (MLLW)], freshwater flows in a pool and riffle configuration in the channel. Typically, however, the tide is high enough to give this portion of Hylebos Creek the appearance of a tidal slough (Figure 2).

The substrate of Hylebos Creek in the project reach is primarily soft mud with minor components of gravel and larger cobbles. The overlying mud/silt substrate was removed at several points and the underlying materials examined. This qualitative examination revealed apparent anaerobic conditions and no benthic (bottom-dwelling) or epibenthic organisms. There are no barriers to upstream fish migration at the project site. Log rafting activity in the Hylebos Creek proximity may disturb salmon migration.

Proposed Nursery Project Site. The Nursery site is located waterward of Marine View Drive near the Hylebos Waterway west end, on property held in Trust for the Puyallup Tribe. The site is approximately 360 by 80 feet, or 0.66 acres. The upland portion of the site was constructed from a gravelly sand fill material and slopes gently toward the south. Upland vegetation consists of trees, blackberry bushes, and grasses. A strip of intertidal marsh vegetation approximately three to four feet wide is located near the mean higher high water (MHHW) line. Low-gradient mudflats that provide habitat for benthic (bottom-dwelling) organisms of particular importance to shorebirds and juvenile salmonids are located below MHHW. The site contains several pilings, logs, and riprap indicative of previous log storage activities in the area.

The project site vicinity includes narrow intertidal and subtidal margins broken by commercial marinas and log storage areas. To the north, and across Marine View Drive, is a woody, steep sloped area. East and west of the site are additional intertidal and mudflats that have been designated as natural resource conservancy areas by the Puyallup Tribe. The project site is situated in a portion of Commencement Bay containing the largest area of undisturbed mudflats, and is an important migratory route for salmonids, waterfowl, and shorebirds.

Preferred Restoration Alternatives. The projects are to restore and enhance estuarine habitat, maximize residence time for juvenile salmonids and provide landscape connectivity with the WSDOT mitigation site immediately upstream. A salt marsh will be planted at an elevation near MHHW on gently sloping surfaces and will be similar in height to the historical tideflats to the extent feasible.

Wasser/Winter Preferred Alternative. The Wasser/Winter site will provide approximately 2.3 acres of intertidal habitat by removing 17,700 cubic yards (cy) of existing fill material, to create permanently flooded backwater pools and intertidal salt marshes. Proposed work consist of the following:

- Installation of a silt fence and bale dikes on or near the project boundary;

- Removal of 17,700 cy of existing fill;

- Grading the excavated surface to construct backwater pools;

- (Backwater pools will not be exposed to tidal inundation until just before project completion. Fill removal below MHHW will likely require dewatering to allow equipment access)

- Placing a growth media (top soil) to encourage plant growth, and

- Revegetating with native salt marsh and riparian plants and installing several pieces of large woody debris. Approximately 1.5 acres of the site will be graded and/or excavated to restore the habitat.

Heavy equipment used for construction will probably include backhoes, front-end loaders, bulldozers, and dump trucks. No pilings will be installed as part of the project. Neither drilling equipment nor blasting will be used during the project.

Nursery Site Preferred Alternative. The project goal is to create intertidal salt marsh habitat to replace the industrially filled upland areas.

Approximately 0.66 acres of intertidal habitat will be restored by grading an area north of the existing vegetation line and by replanting an intertidal vegetation community (Figure 4). Runoff from the hillside on the north side of Marine View Drive will be intercepted and routed through the project site in a dendritic channel pattern. Topsoil will be placed in excavated areas to encourage plant growth. A berm will be constructed next to Marine View Drive and planted with riparian plants to discourage trespassers from entering the site. Proposed work consist of the following:

Installation of a silt fence and straw bale dikes on or near the project boundary;

Removal of 2,000 cy of fill from the existing upland areas;

Demolition of a portion of the stormwater system where it discharges to the mudflats;

Construction of small channels to redirect the stormwater through the site in dendritic channels;

Placing topsoil to support growth of intertidal and riparian vegetation; and

Replanting with native salt marsh and riparian plants. Approximately 0.66 acres will be graded and/or excavated to restore the habitat.

Heavy equipment used for construction will probably include backhoes, front-end loaders, bulldozers, and dump trucks. No pilings will be installed as part of the project. Neither drilling equipment nor blasting will be used during the project.

Timing/Chronology Of Specific Construction Actions A three-month window is anticipated for all construction at both the Wasser/Winter and Nursery sites, which is expected to include no more than 45 days of actual construction. The timing for in water work will be determined by the Hydraulic Project Approval (HPA) issued by the Washington Department of Fish and Wildlife (WDFW). The expected in-water work window for this project will be between June 15 and August 31 when low tides occur during daylight hours and the most opportunity exists to minimize in-water work. This timing is also consistent with the in-water construction season for Commencement Bay (June 15 through the winter to March 14).

Affected Species. Five species provided protection under the ESA are cited as possibly present in the vicinity of Commencement Bay: humpback whale (*Megaptera novaengliae*), leatherback sea turtle (*Dermochelys coriacea*), Steller sea lion (*Eumetopias jubatus*), bald eagle (*Haliaeetus leucocephalus*), and Puget Sound Evolutionarily Significant Unit (ESU) chinook salmon (*Oncorhynchus tshawytscha*). Additionally, the Puget Sound coastal bull trout (*Salvelinus confluentus*), and Puget Sound/Straight of Georgia ESU coho salmon, proposed and candidate species, respectively, under ESA provisions may occasionally be present in the proposed project area. Humpback whales, leatherback sea turtles and Steller sea lions do not inhabit the proposed projects vicinities, and will not be effected from the proposed

project.

Determinations of Effect. In-water construction schedules are based on times of the year when few salmon, if any, will be in the proposed project area. The construction will observe seasonal conditions established by the Washington Department of Fish and Wildlife in their Hydraulic Project Approval and supported by the National Marine Fisheries Service to avoid impacts. Therefore, potential short-term minor temporary impacts of turbidity, excavation releases, noise, and emissions from construction vehicles, if they occur, will not coincide with the presence of Coho (Candidate) and Chinook salmon at these sites. The proposed projects are not likely to adversely affect any endangered or threatened or candidate species or their habitats due to the methods and timing of all activities. These include the following measures.

Construction shall only occur within the work-window (Mid June to end of August) specified for the project and in the dry to the maximum extent possible. This will limit the sedimentation in the Hylebos Waterway to summer months, after the peak smolt migration, and before spawning, and intragravel development periods for chinook and coho in the fall.

The Temporary Erosion and Sedimentation Control Plan (TESCP) shall be implemented as shown in the contract documents and construction drawings. The TESCP shall be implemented before the start of any ground disturbing activities. The TESCP shall be based on the proponents current Best Management Practices and include measures such as silt fences, straw bale dikes, and dewatering to allow excavation to proceed in unsaturated conditions.

A responsible party shall inspect the site during construction to verify that the contractor is effectively implementing the TESCP. Work procedures that are out of compliance shall be terminated and an acceptable solution developed before work is allowed to continue.

No hazardous materials or toxic materials shall be transferred or stored within 50 feet of the MHHW of Hylebos Creek or Hylebos Waterway.

No equipment shall be refueled or maintained within 50 feet of the MHHW of Hylebos Creek or Hylebos Waterway. Equipment shall be serviced or maintained in designated areas where stormwater runoff can be prevented

from directly entering the water.

An emergency spill kit shall be stored at each work site and construction crews trained in their proper use.

All crewmembers and all onsite personnel shall be informed of any and all environmental precautions. These precautions shall include: clearly marking the work area, clearly marked clearing limits, specifically identifying riparian vegetation to be removed, and all applicable laws and permit conditions.

MEMORANDUM FOR THE RECORD

FROM: Russell Bellmer *Russell Bellmer*

JAN 1 2000

SUBJECT: EFH Concurrence with a Determination of no Adverse Affect for the Proposed Wasser/Winter and Nursery Site Restoration Projects in Tacoma, WA.

Wasser/Winter Proposed Project Site. The Wasser/Winter site is located in the City of Tacoma between Marine View Drive and the upper turning basin of the Hylebos Waterway, on land owned by the Port of Tacoma, WA. The site is adjacent to the tidally influenced, channelized, lower reach of Hylebos Creek where the creek drains into the Hylebos Waterway. Upland areas of the project site encompass a flat area vegetated with grasses and shrubs. The site itself extends northeast from the centerline of the creek to a fence that borders an asphalt cap/parking area, and seaward to the pierhead line in the turning basin. A log storage yard borders the site to the southwest across Hylebos Creek, and State Route (SR) 509 crosses Hylebos Creek immediately southeast of the site. The site dimensions are approximately 1,000 by 100 feet, totaling about 2.3 acres. Soils are characterized as sandy/silt dredge fill overlying pre-development tideflats.

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Historically, Hylebos Creek has been a prolific salmon-spawning stream (King County and Federal Way, 1990) for chinook, chum, and coho. Salmon runs have declined in part due to urbanization of spawning areas. As of 1990, the watershed was approximately 50 percent developed, which has increased peak flows, degraded the riparian zone, and adversely affected water quality (King County and Federal Way, 1990). Localized areas of suitable spawning habitat exist, however, particularly on the West Branch of Hylebos Creek. In the 1970's and 1980's the Puyallup Tribe stocked Hylebos Creek with chinook, chum and coho (Ladley, personal communication, 1999). Although

these programs have been discontinued, vestigial populations enter the creek annually to spawn. The near-shore area and Hylebos Waterway are used extensively as rearing and feeding habitat by numerous marine species, and as a migratory pathway for salmonids.

Proposed Project Site. At the project site, Hylebos Creek is a straight channel with steep banks, and is tidally influenced. At low tide [below +1 feet above mean lower low water (MLLW)], freshwater flows in a pool and riffle configuration in the channel. Typically, however, the tide is high enough to give this portion of Hylebos Creek the appearance of a tidal slough.

The substrate of Hylebos Creek in the project reach is primarily soft mud with minor components of gravel and larger cobbles. The overlying mud/silt substrate was removed at several points and the underlying materials examined. This qualitative examination revealed apparent anaerobic conditions and no benthic (bottom-dwelling) or epibenthic organisms. There are no barriers to upstream fish migration at the project site. Log rafting activity in the Hylebos Creek proximity may disturb salmon migration.

Proposed Nursery Project Site. The Nursery site is located waterward of Marine View Drive near the Hylebos Waterway west end, on property held in Trust for the Puyallup Tribe. The site is approximately 360 by 80 feet, or 0.66 acres. The upland portion of the site was constructed from a gravelly sand fill material and slopes gently toward the south. Upland vegetation consists of trees, blackberry bushes, and grasses. A strip of intertidal marsh vegetation approximately three to four feet wide is located near the mean higher high water (MHHW) line. Low-gradient mudflats that provide habitat for benthic (bottom-dwelling) organisms of particular importance to shorebirds and juvenile salmonids are located below MHHW. The site contains several pilings, logs, and riprap indicative of previous log storage activities in the area.

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- (Backwater pools will not be exposed to tidal inundation until just before project completion. Fill removal below MHHW will likely require dewatering to allow equipment access)

- Placing a growth media (top soil) to encourage plant growth, and

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Heavy equipment used for construction will probably include backhoes, front-end loaders, bulldozers, and dump trucks. No pilings will be installed as part of the project. Neither drilling equipment nor blasting will be used during the project.

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Determinations of Effect. In-water construction schedules are based on times of the year when few salmon, if any, will be in the proposed project area. The construction will observe seasonal conditions established by the Washington Department of Fish and Wildlife in their Hydraulic Project Approval and supported by the National Marine Fisheries Service to avoid impacts. Therefore, potential short-term minor temporary impacts of turbidity, excavation releases, noise, and emissions from construction vehicles, if they occur, will not coincide with the presence of managed species at these sites. The proposed projects will not adversely affect any managed species or EFHs due to the methods and timing of all activities. These include the following measures.

Construction shall only occur within the work-window (Mid June to end of August) specified for the project and in the dry to the maximum extent possible. This will limit the sedimentation in the Hylebos Waterway to summer months, after the peak smolt migration, and before spawning, and intragravel development periods for chinook and coho in the fall.

The Temporary Erosion and Sedimentation Control Plan (TESCP) shall be implemented as shown in the contract documents and construction drawings. The TESCP shall be implemented before the start of any ground disturbing activities. The TESCP shall be based on the proponents current Best Management Practices and include measures such as silt fences, straw bale dikes, and dewatering to allow excavation to proceed in unsaturated conditions.

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An emergency spill kit shall be stored at each work site and construction crews trained in their proper use.

All crewmembers and all onsite personnel shall be informed of any and all environmental precautions. These precautions shall include: clearly marking the work area, clearly marked clearing limits, specifically identifying riparian vegetation to be removed, and all applicable laws and permit conditions.

EFH Determination. The area in which the restoration projects are planned (grading and excavation of fill material, construction backwater pools, revegetating with native salt marsh and riparian plants, installing

several pieces of large woody debris) has been identified as EFH for species managed by the Pacific Fishery Management Council under the Amendment 11 to The Pacific Coast Groundfish Fishery Management Plan (October, 1998).

This Plan identifies twenty-four species and life stages within the estuarine composite EFH. These species include five species of Class Elasmobranchiomorpha and nineteen species of Class Osteichthyes. Eight species of Family Scorpaenidae (rockfish) and four species of Order Pleuronectiformes (flatfish) are identified within the Plan. Environmental conditions (i.e., temperature, salinity, water depth, substrate) greatly reduce the potential for the presence of these species in the project area for even short periods of time during extreme high tides. The species that may occasionally visit the project area include: *Squalus acanthias* (spiny dogfish), *Raja inornata* (California skate), *Pleuronectes vetulus* (English sole), *Errex zachirus* (rex sole), *Citharichthys sordidus* (Pacific sanddab), and *Platichthys stellatus* (starry flounder). The eggs, larval stages, and some juvenile fish may occasionally be present in the area of the activity. However, due to construction activities in the dry or at extreme low tide during periods of the year with minimum fish activities, no adverse impacts will occur to EFH. Therefore, no additional EFH conservation measures have been provided.

If the proposed project plans are substantially revised or if new information becomes available that affects the basis for no adverse effect determination, then CFI consultation will be undertaken.